CONTENTS

(Abstracts/Contents Lists published in Analytical Abstracts, ASCA, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Current Contents/Life Sciences, Current Contents/Physical, Chemical & Earth Sciences, Deep-Sea Research/Part B: Oceanographic Literature Review, Excerpta Medica, Chromatography Abstracts, Index Medicus, Mass Spectrometry Bulletin, PASCAL-CNRS, Referativnyi Zhurnal and Science Citation Index)

Use of a gamma energy distribution to model the gas chromatographic temperature dependence of solute retention on aryl-siloxane chemically modified porous carbon
by R. K. Gilpin, M. Jaroniec and M. B. Martin-Hopkins (Kent, OH, U.S.A.) (Received April 2nd, 1990) 1

Computer-assisted optimization of two-factor selectivity in gas chromatography using an advanced simplex method
by Q.-S. Wang, C.-S. Zhu and B.-W. Yan (Tianjin, China) (Received March 13th, 1990) . 13

Flame infrared emission–flame ionization detector for gas chromatography
by M. K. Hudson (Little Rock, AR, U.S.A.) and T. Fau, K. Underhill and S. Applequist (Springfield, MO, U.S.A.) (Received March 30th, 1990) 21

Use of M-series retention index standards in the identification of trichothecenes by electron impact mass spectrometry
by R. Kostiainen and S. Nokelainen (Helsinki, Finland) (Received February 26th, 1990) . 31

Determination of biogenic and anthropogenic volatile halocarbons in sea water by liquid–liquid extraction and capillary gas chromatography
by K. Abrahamsson and S. Klick (Göteborg, Sweden) (Received March 28th, 1990) . . . 39

Comparison of quarter-hourly on-line dynamic headspace analysis to purge-and-trap analysis of varying volatile organic compounds in drinking water sources
by J. G. Schnable, B. Dussert and I. H. Suffet (Philadelphia, PA, U.S.A.) and C. D. Hertz (Trenton, NJ, U.S.A.) (Received April 24th, 1990) 47

Determination of solanesol in tobacco by capillary gas chromatography
by W. J. Chamberlain, R. F. Severson and O. T. Chortyk (Athens, GA, U.S.A.) and V. E. Sisson (Oxford, NC, U.S.A.) (Received April 24th, 1990) 55

Gas chromatographic method for the assay of aliphatic and aromatic sulphonates as their tert.-butyldimethylsilyl derivatives
by L.-K. Ng and M. Hupé (Ontario, Canada) (Received April 27th, 1990) 61

Simultaneous determination of neutral and amino sugars in biological materials
by R. J. Kraus, F. L. Shinnick and J. A. Marlett (Madison, WI, U.S.A.) (Received April 18th, 1990) 71

Determination of 2-methylpyrazine and pyrazinamide in reaction mixtures by gas and high-performance liquid chromatography
by S. Husain, P. Nageswara Sarma, S. M. Sajjad, R. Narsimha and M. Subrahmanyam (Hyderabad, India) (Received March 13th, 1990) 83

Fate of superabsorbents in the environment. Analytical techniques
by S. S. Cutié, W. C. Buzanowski and J. A. Berdasco (Midland, MI, U.S.A.) (Received April 4th, 1990) 93

(Continued overleaf)

Solvatochromic hydrogen bond donor acidity of aqueous binary solvent mixtures for reversed-phase liquid chromatography
by J. H. Park, M. D. Jang and D. S. Kim (Gyongsan, South Korea) and P. W. Carr (Minneapolis, MN, U.S.A.) (Received April 26th, 1990) 107

Effect of temperature and organic modifier on the isocratic retention characteristics of nitrated polycyclic aromatic hydrocarbons on a reversed-phase octadecylsilane column
by A. Robbat, Jr. and T. Y. Liu (Medford, MA, U.S.A.) (Received April 3rd, 1990) . . . 117

Correlation of protein partitioning in aqueous polymer two-phase systems
by A. D. Diamond and J. T. Hsu (Bethlehem, PA, U.S.A.) (Received March 1st, 1990) . 137

Investigation of the reversed-phase high-performance liquid chromatographic ligand-exchange retention mechanism on a triamine stationary phase
by T. R. Koziol and M. L. Grayeski (South Orange, NJ, U.S.A.) (Received February 7th, 1990) 145

Evaluation of an alternating current plasma emission detector for high-performance liquid chromatography
by L. A. Colón and E. F. Barry (Lowell, MA, U.S.A.) (Received March 5th, 1990) . . . 159

Molecular recognition in synthetic polymers: preparation of chiral stationary phases by molecular imprinting of amino acid amines
by L. I. Andersson, D. J. O'Shannessy and K. Mosbach (Lund, Sweden) (Received March 9th, 1990) 167

(*S*)-2-hydroxypropyl-β-cyclodextrin, a new chiral stationary phase for reversed-phase liquid chromatography
by A. M. Stalcup, S.-C. Chang and D. W. Armstrong (Rolla, MO, U.S.A.) and J. Pitha (Baltimore, MD, U.S.A.) (Received February 19th, 1990) 181

Coupled column chromatography in chiral separations. I. Enantiomeric separation on swollen microcrystalline cellulose triacetate columns after a preseparation on a non-chiral alkylsilica column
by A. M. Rizzi (Vienna, Austria) (Received March 26th, 1990) 195

Determination of enantiomeric purity of paclobutrazol and fluazifop-P-butyl using a diode-laser-based polarimetric high-performance liquid chromatography detector
by Z. Wu, D. M. Goodall and D. K. Lloyd (York, U. K.) and P. R. Massey and K. C. Sandy (Bracknell, U. K.) (Received April 3rd, 1990) 209

Separation and determination of acidic herbicides on a PRP-1 polymeric column
by A. Betti, G. Lodi and S. Coppi (Ferrara, Italy) (Received March 19th, 1990) 219

Studies on the chromatographic behaviour of some uronic acids and neutral sugars on an amino-bonded phase column
by Y.-A. Wei and J.-N. Fang (Shanghai, China) (Received December 29th, 1989) 227

Applications of high-performance liquid chromatography to quantitation of metabolites and enzymes of the patulin pathway from *Penicillium patulum*
by J. W. Priest and R. J. Light (Tallahassee, FL, U.S.A.) (Received January 2nd, 1990) . 237

Determination of nine flavonoids and coumarins in licorice root by high-performance liquid chromatography
by L. Zeng, R.-Y. Zhang, T. Meng and Z.-C. Lou (Beijing, China) (March 20th, 1990) . . 247

Identification of ferrioxamines by high-performance liquid chromatography and diode-array detection
by H.-P. Fiedler, J. Meiwes, I. Werner, S. Konetschny-Rapp and G. Jung (Tübingen, F.R.G.) (Received March 23rd, 1990) 255

High-performance liquid chromatographic method for the comparison of tanning capacity of tannic acid batches used in the manufacture of pregnancy testing kits
by D. J. Turley, M. T. Kelley and M. R. Smyth (Dublin, Ireland) (Received May 1st, 1990) 263

Applications of gel filtration chromatography for resole phenolic resins using aqueous sodium hydroxide as solvent
by T. Sellers, Jr. and M. L. Prewitt (Mississippi State, MS, U.S.A.) (Received April 24th, 1990) 271

Separation and determination of lipophilic corticosteroids and benzothiazepin analogues by micellar electrokinetic chromatography using bile salts
by H. Nishi, T. Fukuyama and M. Matsuo (Osaka, Japan) and S. Terabe (Kyoto, Japan) (Received February 22nd, 1990) 279

Preparative isotachophoretic analyser equipped with a dropwise fractionating device
by T. Hirokawa, J.-Y. Hu, K. Umeda, G. Kimura, H. Ikeda, F. Nishiyama and T. Kiso (Higashi-Hiroshima, Japan) (Received March 27th, 1990) 297

Notes

Possible value of a liquid crystal stationary phase for the gas chromatographic study of aromatic constituents of essential oils
by T. J. Betts (Perth, Western Australia, Australia) (Received April 5th, 1990) 311

Gas chromatographic separation of monoterpene hydrocarbon enantiomers on -cyclodextrin
by M. Lindström, T. Norin and J. Roeraade (Stockholm, Sweden) (Received March 28th, 1990) 315

Determination of sunscreen agents in cosmetic products by gas chromatography and gas chromatography–mass spectrometry
by K. Ikeda, S. Suzuki and and Y. Watanabe (Tokyo, Japan) (Received February 2nd, 1990) 321

Gas–liquid chromatographic method for the determination of marine wax esters according to the degree of unsaturation
by G. Kattner, M. Graeve and W. Ernst (Bremerhaven, F.R.G.) (Received March 22nd, 1990) 327

Behaviour of 23 persistent organochlorine compounds during sulphuric acid clean-up and a solid-matrix column
by A. di Muccio, A. Santilio, R. Dommarco, M. Rizzica, L. Gambetti, A. Ausili and F. Vergori (Rome, Italy) (Received March 22nd, 1990) 333

Gas–liquid chromatographic analysis of carboxymethylcellulose and carboxymethylstarch
by S. Ukai, A. Honda, K. Nagai and T. Kiho (Gifu, Japan) (Received January 8th, 1990) 338

Identification of very long polyenoic acids as picolinyl esters by Ag^+ ion-exchange high-performance liquid chromatography, reversed-phase high-performance liquid chromatography and gas chromatography–mass spectrometry
by T. Řezanka (Prague, Czechoslovakia) (Received March 19th, 1990) 344

Information theory of column chromatography on the basis of the information measure FUMI
by Y. Hayashi and R. Matsuda (Tokyo, Japan) (Received January 23rd, 1990) 349

Optimization of high-performance liquid chromatographic analysis with UV detection: light-scattering detection to establish the coelution of UV- and non-UV-absorbing constituents
by C. Elfakir, M. Lafosse and M. Dreux (Orléans, France) (Received April 3rd, 1990) . . 354

Optimization of the isocratic high-performance liquid chromatographic separation of selected phthalates using the overlapping resolution mapping technique
by M. R. Khan, C. P. Ong, S. F. Y. Li and H. K. Lee (Singapore, Singapore) (Received March 16th, 1990) 360

Effect of type and concentration of coupling buffer on coupling yield in the coupling of proteins to a tresyl-activated support for affinity chroomatography
by K. Nakamura, T. Hashimoto and Y. Kato (Yamaguchi, Japan) and K. Shimura and K.-I. Kasai (Kanagawa, Japan) (Received February 27th, 1990) 367

(Continued overleaf)

Separation of enantiomers using polymeric copper–amine–cellulose columns
by S. Muralidharan and H. Freiser (Tucson, AZ, U.S.A.) (Received april 10th, 1990) . . 370

Optical resolution of dihydropyridine enantiomers by high-performance liquid chromatography using phenylcarbamates of polysaccharides as a chiral stationary phase
by Y. Okamoto, R. Aburatani and K. Hatada (Osaka, Japan) and M. Honda, N. Inotsume and M. Nakano (Kumamoto, Japan) (Received March 20th, 1990) 375

Analytical and preparative separation of glucosylceramide and galactosylceramide by borate-impregnated silica gel chromatography
by Y. Saga, S. Gasa, A. Makita and K. Oikawa (Sapporo, Japan) (Received March 7th, 1990) 379

High-performance ion-exchange chromatography of peptides on a pellicular ion exchanger
by Y. Kato, S. Nakatani, T. Kitamura, A. Onaka and T. Hashimoto (Yamaguchi, Japan) (Received February 27th, 1990) 384

Simple method for the isolation of azadirachtin by preparative high-performance liquid chromatography
by T. R. Govindachari, G. Sandhya and S. P. Ganeshraj (Madras, India) (Received January 5th, 1990) 389

High-performance liquid chromatographic analysis of trimethoprim in the presence of its degradation products
by J. J. Bergh, J. C. Breytenbach and J. L. Du Preez (Potchefstroom, South Africa) (Received April 23rd, 1990) 392

Determination of isoflavones from *Ononis spinosa* L. extracts by high-performance liquid chromatography with ultraviolet diode-array detection
by P. Pietta and P. Mauri (Milan, Italy) and E. Manera and P. Ceva (Mede, Italy) (Received March 1st, 1990) 397

Use of thin-layer chromatography for the testing of avermectins produced by *Streptomyces avermitilis* strains
by M. Malaníková and V. Malaník (Koufim, Czechoslovakia) and M. Marek (Prague, Czechoslovakia) (Received February 27th, 1990) 401

Letter to the Editor

Preparation of pyrrolidides from fatty acids via trimethylsilyl esters for gas chromatographic–mass spectrometric analysis
by W. Vetter and W. Walther (Basle, Switzerland) (Received March 13th, 1990) 405

Author Index 409

Instructions to Authors 413

In articles with more than one author, the name of the author to whom correspondence should be addressed is indicated in the article heading by a 6-pointed asterisk (*)